**🤘🤘🤘 Welcome to the Serverless Automation land 🤘🤘🤘**

This lab focuses on provisioning and deploying a serverless Web Application in AWS using infrastructure as code.

**Introduction**

Today you are the CTO of your startup and your co-founder asked you to develop the website of the company. Since the company is just starting and the website will have a lot of changes in the future, your co-founder asks you to handle all changes in the most cost-efficient way.

After a long session of requirements, you come out of the meeting with the following ones:

1. The website is accessible over the internet and mostly accessed in Germany
2. You don't know which load to expect
3. Your IT budget is very reduced and infrastructure costs must be minimized
4. For pre-live stages, the website can only be accessed from the IP addresses of the company
5. You need to make multiple changes in the website in the upcoming days and weeks. Therefore, you both decided that its needed to have infrastructure as code and ci/cd automation

**Tasks**

**Task 1** - Design an architecture using as core hosting component AWS S3 Website Hosting and covering all services that you need in AWS to provision, deploy, test and run the website. Use draw.io for the architectural diagram and describe it in text analyzing why you choose each AWS service. Take into consideration security and performance best practices.

**Task 2** - Calculate the cost of the architecture for one year

**Task 3 -** provide an S3 resource policy for fulfilling requirement (4)

**Task 4** - Provide an infrastructure as code cloudformation stack (yaml or json file) for the S3 website hosting so that it can be deployed automatically. Note: you don't need to provide the cloudformation for the domain, SSL certificate, and ci/cd pipeline.

**Material**

The **build.zip** archive contains the react website. You don't need to develop the website itself, but only focus on the deployment automation in AWS.